

# CLEARING THE AIR An APCD Workshop Series

July 16 APCD 101/Louisville's Air Quality

July 30 Air Quality & Health/Reducing My Pollution Impact

**Aug. 13** Odors: Reporting and Responding

<u>Aug. 27</u> The APCD Regulatory Process

Sept. 10 How We Monitor Air Quality

Sept. 22 Understanding Risk: A Technical Workshop\*

(How to use EJ Screen, TRI, and other EPA data tools)

**Sept. 24** The STAR Program/Environmental Justice

QUESTIONS?

Call us at

(502) 574-6000

Workshops held at the Louisville Free Public Library, 301 York St. Each session is 5:30-7 p.m.

(\*Technical Workshop 10 a.m.-2 p.m. Registration Required. Send email to ClearingTheAir@louisvilleky.gov)

www.louisvilleky.gov/APCD



#### The APCD Workshop Series seeks to:

- Increase the community's understanding of Louisville's air quality and of APCD's many functions
- Provide information that will empower citizens
- Provide a more informal forum for Q&A with APCD and opportunity for feedback
- Improve related public outcomes



#### Today's workshop seeks to:

- 1. Help our community better understand the impacts air pollution/poor air quality have on human health
- Discuss the contributors to air pollution and poor air quality in Louisville Metro
- Explore what we as policy-makers, local government agencies, community organizations/groups, and individuals — can do to reduce our exposure and contribution to pollution in the air



# CLEARING THE AIR An APCD Workshop Series

- There are no silly questions
- Public Participation =

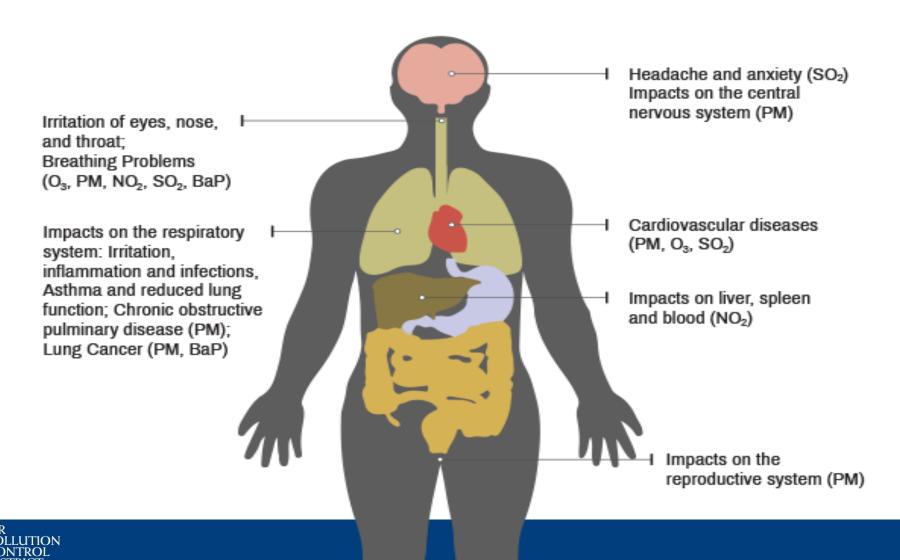




- Interactive
  - Ask questions throughout the workshop as they come to mind
  - Use the Post-It notes to write down questions and place them around the room



## **Health Impacts of Poor Air Quality**



## **Health Impacts of Poor Air Quality**

- Fetal development
- Obesity
- Learning disabilities
- Autism
- Reduced lung function
- Diabetes

- Birth defects
- Low birth weight
- Heart disease
- Lung cancer
- Stroke
- Alzheimer's
- COPD
- Allergies

- Respiratory issues
- Cardiovascular diseases (heart attacks, strokes, heart failure)
- Headaches
- Asthma

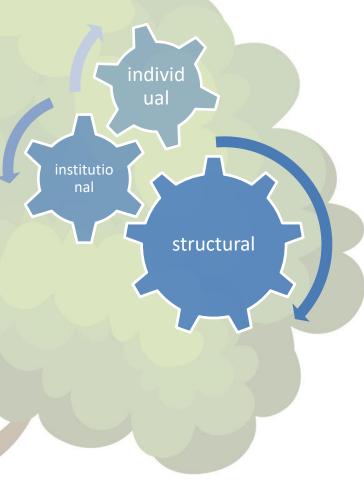




## **ROOT CAUSES**

SYSTEMS OF POWER

Download the report at HealthEquityReport.com



#### **Definitions**

#### Individual racism

 Pre-judgment, bias, or discrimination by an individual based on race.

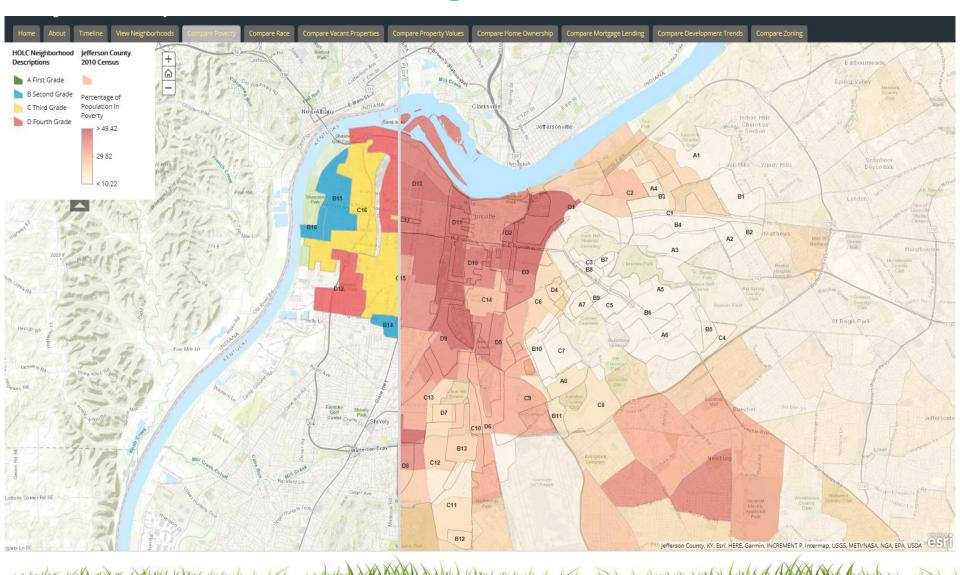
#### Institutional racism

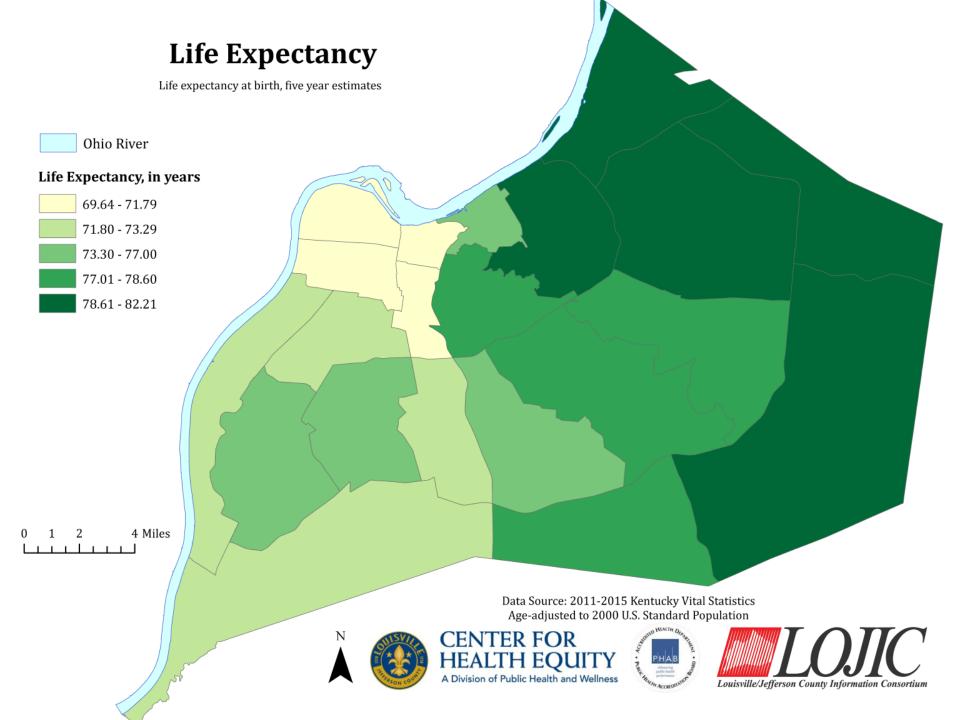
 Policies, practices and procedures that work better for white people than for people of color, often unintentionally or inadvertently.

#### Structural racism

 A history and current reality of institutional racism across all institutions, combining to create a system that negatively impacts communities of color.

## **Redlining Louisville**





## **Environmental Quality Definition & Scope**



**Environment = Domains** 



Air



Water

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Soil



**Built Environment** 

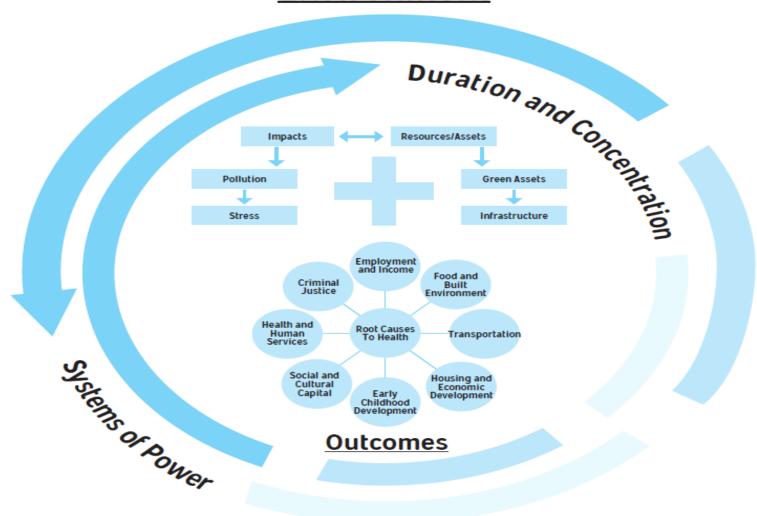
#### Quality = Characteristics

- Physical
- Chemical
- Biological
- Human Impacts

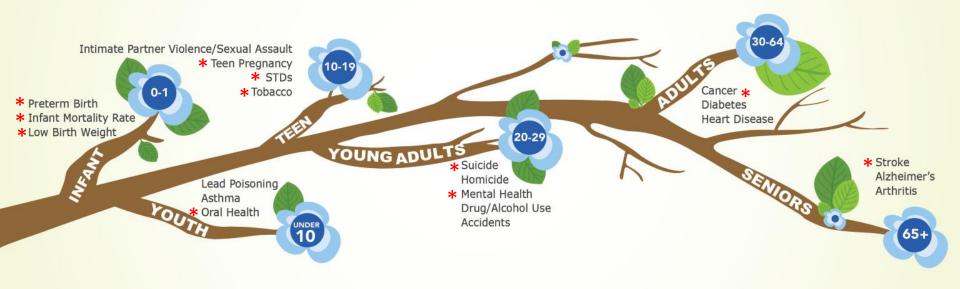
"How the physical, chemical, biological factors and related human behaviors affect the quality/health of a community's air, water, soil, and built environment."

Goal → "Promote policies and development that protect and improve our environmental quality."

## **Environmental Quality & Causation Environment**



## Health Outcomes Across the Life Course



Cancer Deaths Total 2011 - 2015

Cancer Incidence & eath Rates 2011 - 2014

# Root Causes | Health Outcomes

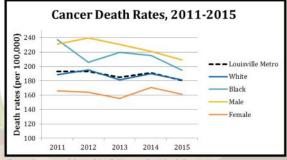
|                  | Count | Age-adjusted rate<br>(per 100,000) |
|------------------|-------|------------------------------------|
| Black Male       | 701   | 263.08                             |
| White Male       | 3,366 | 225.01                             |
| Louisville Metro | 8,240 | 188.47                             |
| Black Female     | 733   | 184.89                             |
| White Female     | 3,308 | 162.04                             |
| Hispanic Male    | 38    | 113.89                             |
| Other Female     | 36    | 106.82                             |
| Hispanic Female  | 33    | 93.60                              |
| Other Male       | 25    | 85.08                              |

Data Source: 2011-2015 Kentucky Vital Statistics Age-adjusted to the 2000 U.S. Standard Population. Racial categories are non-Hispanic.

| Cancer Type                      | Louisville Metro<br>Age-adjusted<br>Incidence Rate | Louisville Metro<br>Age-adjusted<br>Death Rate |  |
|----------------------------------|--|--|--|
| All Cancers                      | 593.3  | 191.0  |  |
| Lung and bronchus                | 89.0   | 59.5   |  |
| Breast (female only)             | 172.2  | 23.3   |  |
| Prostate                         | 135.8  | 20.1   |  |
| Colorectal                       | 54.6   | 15.5   |  |
| Pancreas                         | 14.3   | 11.8   |  |
| Leukemia                         | 17.8   | 8.0  |  |
| Liver and intrahepatic bile duct | 10.6   | 7.9  |  |
| Non-Hodgkin lymphoma             | 21.7   | 6.7  |  |
| Urinary bladder                  | 22.8   | 4.3  |  |
| Cervical                         | 8.6  | 3.2  |  |
| Melanoma of the skin             | 38.7   | 3.1  |  |
| Oral cavity and pharynx          | 14.7   | 2.7  |  |

Data source: Kentucky Cancer Registry <a href="http://www.cancer-rates.info/ky">http://www.cancer-rates.info/ky</a> Rates are age-adjusted to the 2000 U.S. Standard Population per 100,000 for the years 2011-2014.

Incidence describes the number of newly diagnosed cases.



Data Source: 2011-2015 Kentucky Vital Statistics
Age-adjusted to the 2000 U.S. Standard Population.



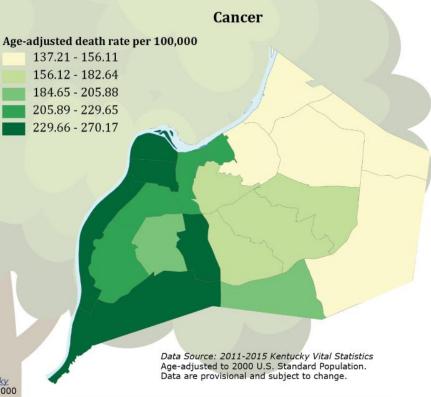
FOOD SYSTEMS



ENVIRONMENTAL QUALITY







Cancer is the leading cause of death for Louisville Metro. Breast and prostate cancers are those that predominantly affect residents. Not all those who get cancer die from it, as the incidence rate (how many new people are diagnosed each year) is almost 3 times higher than the death rate for Louisville Metro, and has slowly been declining. Elevated cancer death rates are clustered in the entire western half of the county. Overall, White and Black men are dying at higher rates than women from any kind of cancer.

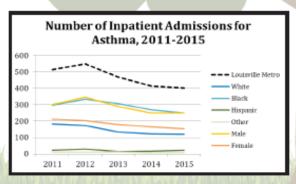
The median age of those who died from cancer in Louisville Metro from 2011-2015 was 72.

### **ASTHMA**

#### Inpatient Admissions for Asthma, 2011-2015

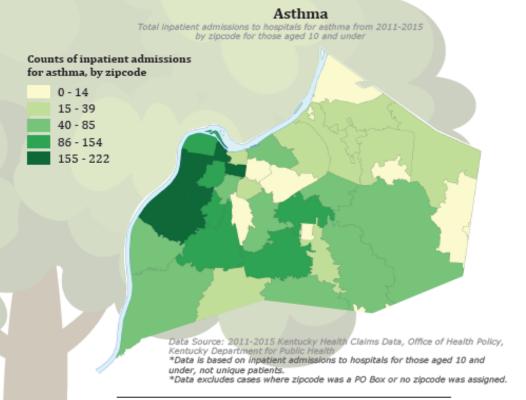
|                  | Count | Percent of<br>Admissions |  |  |  |
|------------------|-------|--------------------------|--|--|--|
| Louisville Metro | 2350  | 100.00%                  |  |  |  |
| Black Male       | 881   | 37.49%                   |  |  |  |
| Black Female     | 578   | 24.60%                   |  |  |  |
| White Male       | 452   | 19.23%                   |  |  |  |
| White Female     | 283   | 12.04%                   |  |  |  |
| Hispanic Male    | 72    | 3.06%                    |  |  |  |
| Hispanic Female  | 35    | 1.49%                    |  |  |  |
| Other Male       | 32    | 1.36%                    |  |  |  |
| Other Female     | 17    | 0.72%                    |  |  |  |

Data Source: 2011-2015 Kentucky Health Claims Data, Office of Health Policy, Kentucky Department for Public Health Data is based on inpatient admissions to hospitals for those aged 10 and under, not unique patients.



Data Source: 2011-2015 Kentucky Health Claims Data, Office of Health Policy, Kentucky Department for Public Health Data is based on inpatient admissions to hospitals for those aged 10 and under, not unique patients.





Currently, there is not a county-wide system that tracks how many children have asthma. The best comparison we have is inpatient hospital admissions, which track the number of times someone is admitted to the hospital for an asthma-related problem.

These visits tend to be predominantly from Black children, although it is hard to know if there are more Black children with severe asthma problems or if a few children are repeatedly going to hospitals for acute care (or a mix of both).

Overall, inpatient visits have been decreasing with time, potentially as a result of more residents obtaining insurance and primary care through the Affordable Care Act.





## **LEAD POISONING**

#### Lead Poisoning in kids under 6, 2011-2016

|                             | Number of tests | Number of<br>children |
|-----------------------------|-----------------|-----------------------|
| Blood lead level ≥ 5 μg/dL  | 2319            | 1413                  |
| Blood lead level ≥ 15 µg/dL | 332             | 139                   |

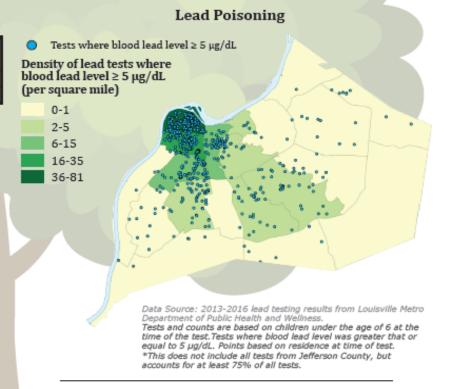
Data Source: 2011-2016 lead testing results from Louisville Metro Department of Public Health and Wellness.

Tests and counts are based on children under the age of 6 at the time of the test.

There are no safe levels of lead, however, the Centers for Disease Control suggests that a level of 5 micrograms per deciliter ( $\mu g/dL$ ) or higher is a "level of concern" in children. Data is reviewed for those under the age of 6, because this is the age cut off for federal lead programs.

In Louisville Metro, the most reliable lead data comes from the Louisville Metro Department of Public Health and Wellness, although it is not comprehensive of all lead tests that occur in the county. As such, the actual numbers are probably higher.

An estimated 1,413 children have blood lead levels that are 5  $\mu$ g/dL or higher. These positive tests are clustered in downtown, west, and south Louisville.











In the Unites States, lead-based paint has been a major source of lead exposure. In 1978, the Unites States banned the use of lead-based paint, although some states stopped using it earlier. Because lead-based paint was used in homes for decades, many homes built before 1978 likely have old lead paint. The risk of lead poisoning increases as the paint peels, cracks, or is worn down. This is because the chips and dust can spread around a home, onto hands, toys and into the mouths of the occupants.<sup>2</sup>

The type of housing you live in can also have an impact on a child's health. For example, rental units have been linked to poor health outcomes, like lead poisoning, and are often occupied by residents with almost one-third of the median incomes of those who own their homes. This has a particular impact on families who live in poverty because they are more likely to both rent and occupy homes with severe physical problems. Because it is often outside of their control, families who don't own homes must rely on the landlord or homeowner to commit the needed financial resources to eliminate the exposure to lead-based paint.



#### NEIGHBORHOOD DEVELOPMENT

Since the 1930's, housing and lending practices, such as redlining, have negatively impacted Louisville Metro by preventing equitable neighborhood development. Outlawed by the Fair Housing Act in 1968, redlining was the federal policy of denying home loans to people based on their race. Today, communities are still navigating the consequences, as well as the ways in which redlining has evolved in practice.

The help given to White communities in the first half of the 1900s, including subsidized development and homeownership assistance, was critical to developing thriving neighborhoods.13 The stark contrast for communities of color, especially Black communities, led to a significant difference in wealth accumulation between neighborhoods.14 Over time, houses in communities of color often fell into disrepair and lead paint began to break down. Because of the expensive costs, lead paint is often not removed or properly maintained and has become a hazard to children living in these homes.15 Policies and practices from over 100 years ago have had very real impacts on families, impacting their ability to build the financial resources needed for the costly repairs necessary to prevent lead paint from becoming a risk to children in their homes.



From the 1970s to the late 1990s. federal regulations began to phase out lead usage in a variety of products.16 Before the 1970s, lead was commonly used to create products we still use every day, such as water pipes, gasoline, and paint.16 Even though lead is now banned for use in many products, we still find it in our current environment, either from products that haven't been replaced or lingering residue.16 Lead particles from past gasoline exhaust can still be found surrounding major roadways, which often includes private residences and public green space.5 Lead was added to these products to improve their performance but was easily accumulated in the many parts of our environment - air, water, and soil.

Another significant risk of lead exposure is from lead-producing industries, some of which are still in operation today.17 For example, there are thousands of contaminated sites left behind after polluting industries stopped operations, also known as brownfields.18 In addition to leaving behind abandoned buildings or vacant lots, brownfields also have the potential to contaminate beyond property lines through the air, water or soil.18 This uniquely exposes children to the risk of lead exposure when they play outside.18 Research also shows residents. especially children, living near leadproducing industries still in operation are more likely to have elevated lead levels in their blood.18

#### **PUBLIC POLICY**

national, state, local law Connect with your elected officials!

#### COMMUNITY

relationships among organizations How can we link resources together?

#### **ORGANIZATIONAL**

organizations, social institutions Change where you work, learn, pray, and play.

#### **INTERPERSONAL**

family, friends, social networks
Support each other!

#### INDIVIDUAL

knowledge, attitudes, skills What you can do!

## Best Practices... Are Evidencebased!

#### **BEST PRACTICES**

To reduce lead poisoning in our community, we must work together at multiple levels to create long-term solutions. This means investing in both programs for individuals and policies that will change the landscape. Here are evidence-based actions we can take at every level in our communities to improve health outcomes.







Individual Actions You Can Take

\*Louisville Metro Government is working on or has accomplished these initiatives.

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Strengthen local enforcement capabilities for homes determined to have lead hazards, making homeowners, including landlords, accountable for abating home lead hazards.



\*Continue to enforce the Environmental Protection Agency's (EPA) Lead Based Paint Renovation, Repair and Painting (RRP) Law for contractors who work in pre-1978 buildings.<sup>19</sup>



Ensure that Medicaid, Medicare and private health insurance cover lead screenings, environmental testing and treatment.



\*Increase funding for the Louisville Affordable Housing Trust Fund and home improvement loans and grants to help generate a greater inventory of healthy, affordable housing for low-income residents.<sup>20</sup>



Ensure that home-buyers and renters know their legal rights when it comes to lead inspections.<sup>21</sup>



\*Target education and prevention efforts in the highest risk areas of Louisville Metro and encourage blood lead screening for children at community gatherings and health fairs.



Create a strong network of referral agencies that have resources for families experiencing difficulties with lead such as Lead Safe Louisville, Metropolitan Housing Coalition, Louisville Water Company, and the Louisville Metro Department of Public Health and Wellness' Childhood Lead Poisoning Prevention Program (CLPPP).



Increase funding for environmental screening and lead abatement programs,22



\*Continue to support incentives for brownfield assessment and remediation.<sup>23</sup>



\*Expand the LMPHW CLPPP's healthy home environment assessments and case management for children with elevated blood lead levels.<sup>24</sup>



Create a compliance check model to ensure contractors stay up to date with their certifications and are following the Renovation, Repair and Painting (RRP) Law while on all work sites for the duration of the project. 19



\*Educate primary care providers on required and recommended blood lead testing and screening schedules (especially for Medicaid required intervals) as well as follow-up procedures for children who have elevated blood lead levels.



Ensure that parents understand risks for lead exposure, how to prevent it, and how to treat if lead levels are elevated.



Get your children screened for lead, especially if you live in a home built before 1978.

#### Kentucky Cancer Program

For information about treatment and support for cancer, visit Kentucky Cancer Program: http://www.kcp.ukv.edu/

#### **Smoking Cessation Classes**

Louisville Metro provides resources including classes to help people quit smoking: <a href="https://louisvilleky.gov/government/stop-smoking-class-schedule">https://louisvilleky.gov/government/stop-smoking-class-schedule</a>

#### Office of Resilience and Community Services

Louisville Metro provides many services related to education, finances, and financial empowerment. To learn more visit: <a href="https://louisvilleky.gov/government/resilience-and-community-services/seeking-ser

#### Local Food Resource Guide

For more information on the Louisville Farmers Market Association and Local Food Resources, visit: <a href="https://louisvilleky.gov/government/mayors-healthy-hometown-movement/services/healthy-eating">https://louisvilleky.gov/government/mayors-healthy-hometown-movement/services/healthy-eating</a>

#### SNAP

If you're interested in the Supplemental Nutrition Assistance Program (SNAP), visit: http://chfs.ky.gov/dcbs/dfs/foodstampsebt.htm

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#### **RESOURCES**

RESOURCES

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RESOURCES

#### **Air Now Air Quality Index**

To see daily air quality conditions in Louisville Metro visit: www.airnow.gov

#### **Kentuckiana Air Education (KAIRE)**

A branch of the Air Pollution Control district, KAIRE provides education and helps share tips on what residents can do to improve air quality. For more information visit: <a href="https://www.helptheair.org">www.helptheair.org</a>

#### Local Tenant Rights, Laws, and Protections

To learn more about your rights to housing as a renter, visit: <a href="https://portal.hud.gov/hudportal/HUD?src=/states/kentucky/renting/tenantrights">https://portal.hud.gov/hudportal/HUD?src=/states/kentucky/renting/tenantrights</a>

#### **Air Pollution Control District**

For more information on local, state and federal regulations around air quality and emissions visit: <a href="www.louisvilleky.gov/government/air-pollution-control-district">www.louisvilleky.gov/government/air-pollution-control-district</a>

#### Urban Heat Island Project and Cool 502

To learn more about the Urban Heat Island Effect, visit the Office of Sustainability's website: https://louisvilleky.gov/government/sustainability/urban-heat-island-project.

#### Childhood Lead Poisoning Prevention Program

If you're interested in learning more about Childhood Lead Poisoning and how to prevent it, contact Louisville Metro Department of Public Health and Wellness' Childhood Lead Poisoning Prevention Program

Call 502-574-6650 or visit our website: https://louisvilleky.gov/government/health-wellness/childhood-lead-poisoning-prevention

#### Lead-Safe Louisville

Louisville Metro Government's Lead-Safe Louisville program helps eliminate lead in owned and rental units. For more information visit: https://louisvilleky.gov/government/housing-community-development/lead-safe-louisville

#### **Provider Toolkit**

Resources are available from Louisville Metro Government for providers. For more information, visit: <a href="https://louisvilleky.gov/government/health-wellness/lead-information-providers">https://louisvilleky.gov/government/health-wellness/lead-information-providers</a>

A toolkit is also available for download from the following link: https://louisvilleky.gov/ file/2017leadpoisoningpreventionprovidertoolkitandguidepdf

#### Environmental Protection Agency (EPA)

The EPA's website has information about lead prevention for homeowners and renters, testing programs, and laws that regulate lead exposure in the United States. For more information visit: <a href="https://www.epa.gov/lead">https://www.epa.gov/lead</a>

#### Louisville Water Company

The Louisville Water Company has a comprehensive lead management program offering testing and information. For more information about lead and water quality visit: <a href="http://www.louisvillewater.com/leadservices">http://www.louisvillewater.com/leadservices</a>

## **CONTACT US**

Center for Health Equity healthequity@louisvilleky.gov 502-574-6616 bit.ly/LouEquity

www.HealthEquityReport.com



#### **FOLLOW US:**

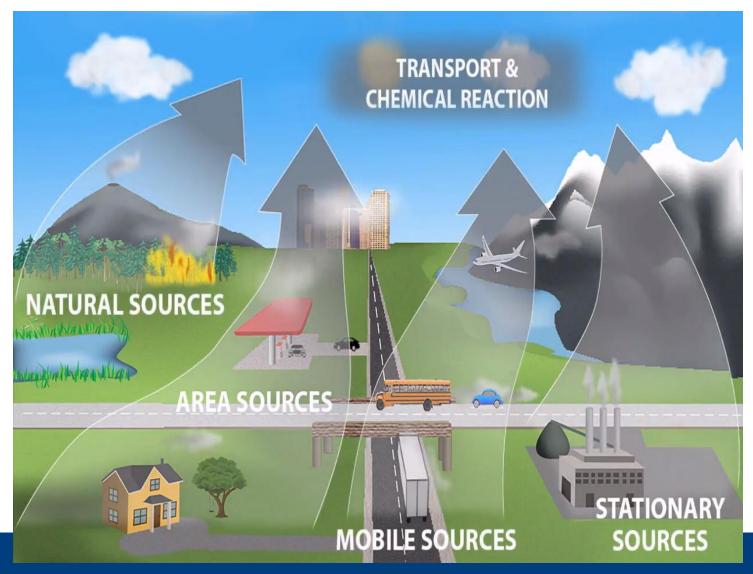




@louequity



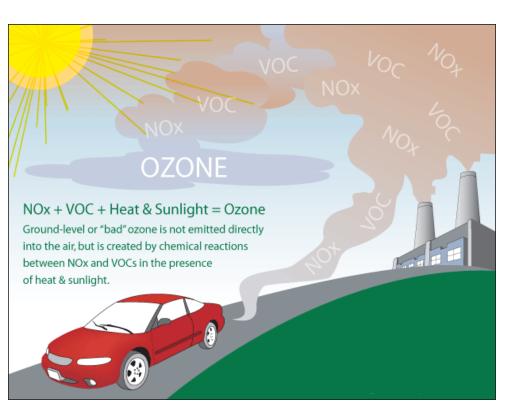
## What contributes to poor air quality?

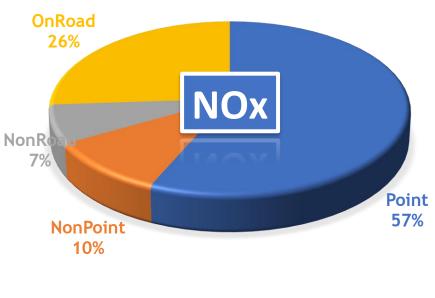


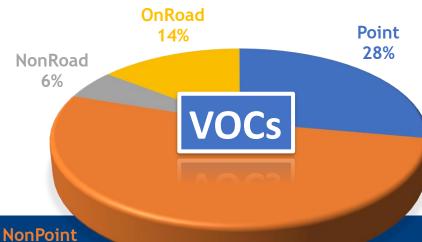


## What sources contribute to ozone?

52%

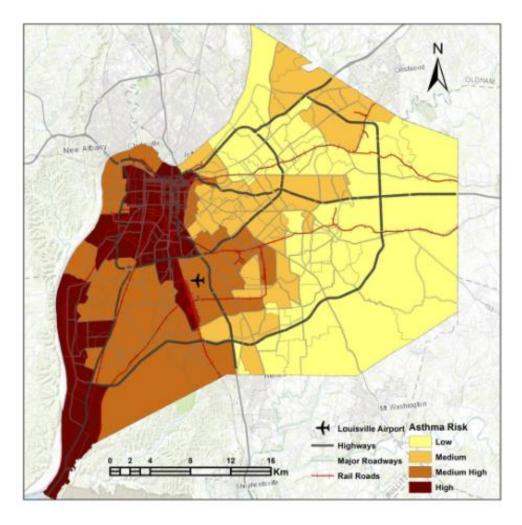








## Sources and pollutants can add up...



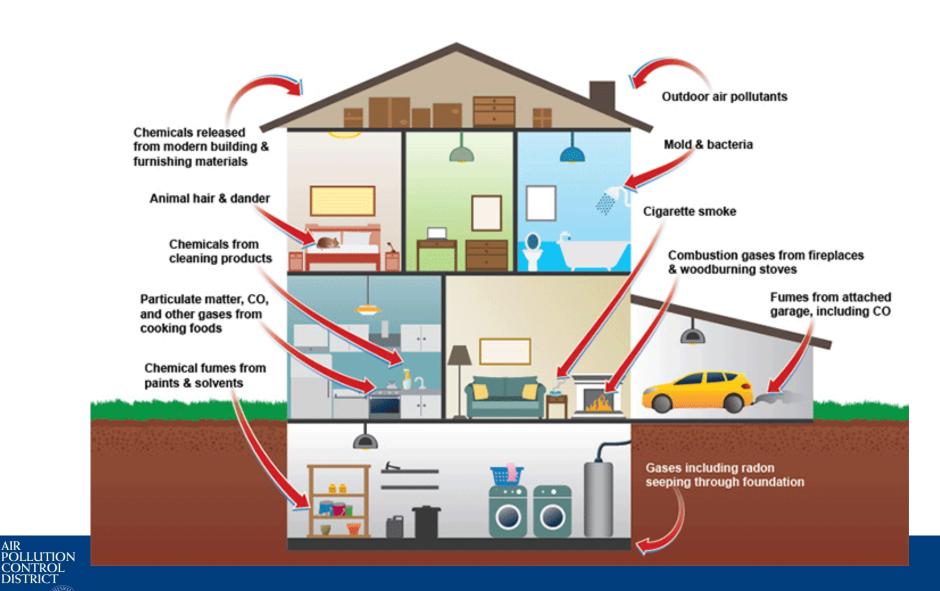
- Mapped data correlated elevated asthma risk with:
  - High Temperatures
  - Ozone
  - Nitrogen Dioxide
  - Sulfur Dioxide



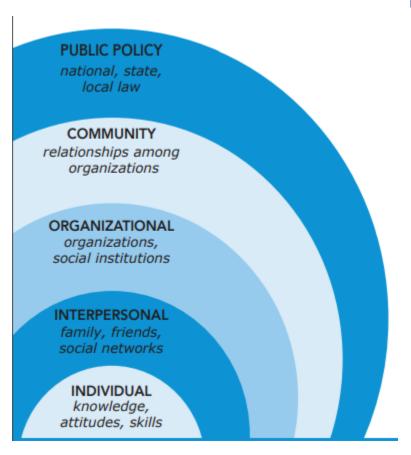
https://airlouisville.com/



## What about indoor air quality?



## What can be done?



- Steps to protect health and improve air quality can happen at all levels, from Government to Individuals.
  - Reduce Emissions
  - Reduce Exposure

Check out the Center For Health Equity's 2017 Health Equity

Report to learn more about the socio-ecologic model and how it is used to recommend best practices for public health.

CENTER FOR

A Division of Public Health and Wellness



## **Public Policy**







 Air Pollution Control District Regulations

- Clean Air Act
- Strategic Toxic Air Reduction (STAR) Program
- Other local regulations



## **Public Policy**

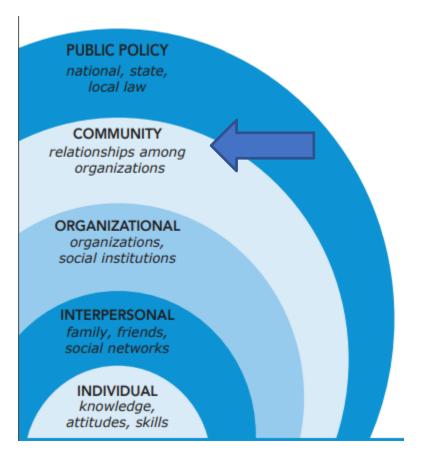




- Public Health and Wellness
  - Smoking Ordinance
  - Health Equity Report
- Office of Sustainability
  - Tree Protection Ordinance
- Develop Louisville
  - Comp Plan
  - Land Development Code
- KIPDA
  - Transportation Planning



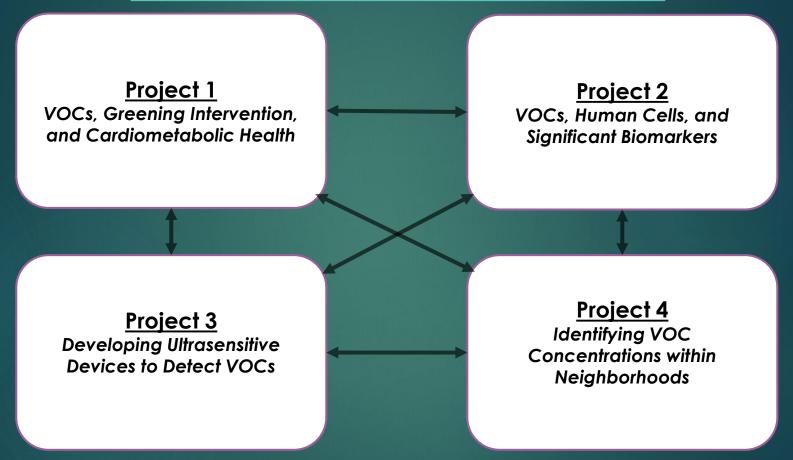
## Community



- Provide Air Quality info
  - Air Quality Alerts local media (tv, print, radio)
  - APCD Website
  - AirNow
  - Louisville Air Watch
- Support local research and data gathering
  - UofL projects
  - AirLouisville
  - EPA RARE project



#### **Uofl SUPERFUND RESEARCH CENTER**



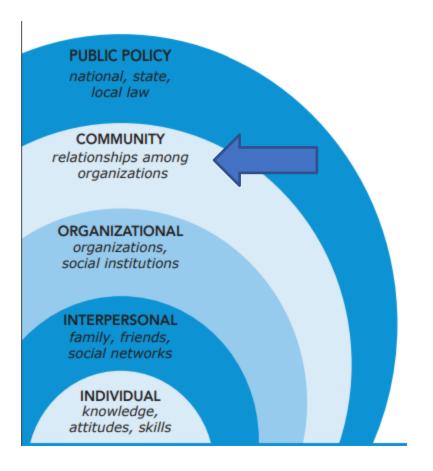


- Strongly integrated with Project 1
- Sign-ups currently taking place
- Phase I: Baseline measurement of health indicators
- Phase II: Plant mature trees throughout target neighborhoods
- Phase III: Conduct second set of health measurements

## AIMS OF THE COMMUNITY ENGAGEMENT CORE

- Facilitate bi-directional dialogues between Superfund researchers and community members that are mutually beneficial
- ► Help form a <u>Community Advisory Board</u> that will act as one of the stirring agents of the Superfund Research Center
- Advance learning on community-engaged research and transferring benefits to both community partners and academics

## Community



Tree Planting Projects





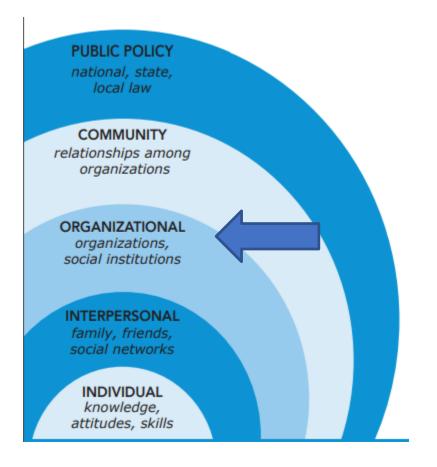


- Cool Roof RebateProgram
  - #Cool502
- Lead Safe Louisville
- Radon Testing Kits





## **Organizational**



- Idle Free Schools
- Idle Free Businesses
- Greener Fleets





Cleaner mowing



Mayor Greg Fischer today announced the formation of the Metro Mow Team that will be able to mow city maintained lots more often. He also announced new policies to pause most mowing by city crews on Air Quality Alert days and reduce areas requiring mowing.



## Interpersonal



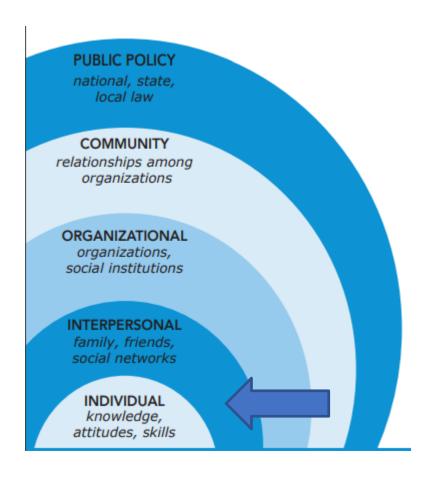
- Support family and friends trying to quit smoking
- Community bike rides
- Carpool/Vanpool
  - Ticket to Ride



 Share knowledge and best practices with your friends and family



## **Individual**



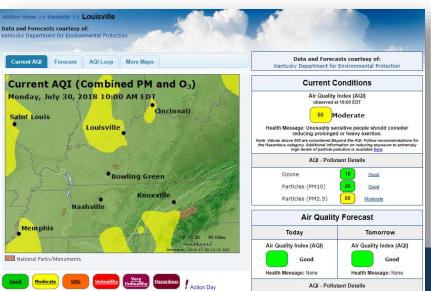
- Know the AQI
- Reduce vehicle emissions: KAIRE
- Reduce lawn care emissions: <u>LCCA</u> & <u>GMML</u>
- Stop smoking
- Reduce use of household chemicals



# **Air Quality Index**

- The AQI is generally based on monitored values for:
  - Ozone
  - Particle pollution
- AQI value of 100 generally corresponds to the NAAQS.
- AQI values at or below 100 are generally thought of as satisfactory.







https://airnow.gov/



# A Guide to the AQI

| AQI Values                                       | Actions to Protect Your Health From Ozone   |
|--|---|
| Good<br>(0 - 50)                                 | None  |
| Moderate<br>(51 - 100*)                          | Unusually sensitive people should consider reducing prolonged or heavy outdoor exertion.  |
| Unhealthy for<br>Sensitive Groups<br>(101 - 150) | The following groups should reduce prolonged or heavy outdoor exertion: - People with lung disease, such as asthma - Children and older adults - People who are active outdoors   |
| Unhealthy<br>(151 - 200)                         | The following groups should avoid prolonged or heavy outdoor exertion: - People with lung disease, such as asthma - Children and older adults - People who are active outdoors Everyone else should limit prolonged outdoor exertion. |
| Very Unhealthy<br>(201 - 300)                    | The following groups should avoid all outdoor exertion: - People with lung disease, such as asthma - Children and older adults - People who are active outdoors Everyone else should limit outdoor exertion.                          |



## **Kentuckiana Air Education (KAIRE)**

KAIRE

Q Search for posts on this Page

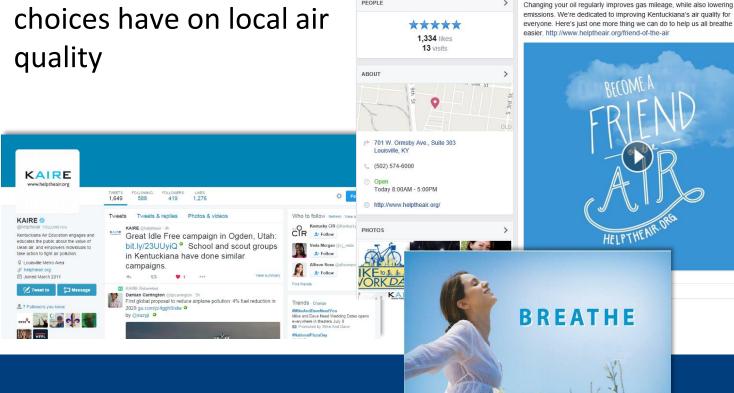
PEOPLE

KAIRE (Kentuckiana Air Education) Education - Government Organization

KAIRE (Kentuckiana Air Education)

#### KAIRE's goal:

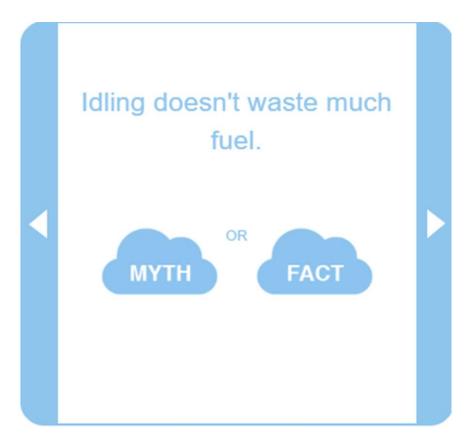
To increase awareness of the impact individual choices have on local air quality











#### MYTH!



Idling for an hour wastes about a half gallon of fuel.



Restarting your engine puts no additional stress on your car.



#### **FACT!**



Restarting puts no more stress on your car than any other normal use. But idling forces it to run inefficiently.



Restarting your car uses more fuel than letting it idle.



#### MYTH!



Experts say that after idling for more than 10 seconds, cars waste fuel.



The best way to warm up your car is by driving it.



#### **FACT!**



Driving your car is the best way to warm it up. Not idling.



- Idle Free Program
  - Businesses
  - Schools
  - Neighborhoods



















- Transportation Choices
  - Ride a bike
  - Walk
  - Use public transit
  - Drive a cleaner car
    - Electric Vehicle
    - Hybrid
  - Carpool/Rideshare
    - Ticket-to-Ride
    - Uber
    - Lyft



- Vehicle Maintenance
  - Keep tires properly inflated
  - Stop at the "click"
  - Perform scheduled maintenance
- Driving Habits
  - Refuel when it's cool
  - Trip chaining
    - Drive less by combining trips





## Lawn Care Myths/Facts

 Grass lawns have always been the norm

MYTH!

Answer: It wasn't until the 1940's and the proliferation of planned subdivisions that we first saw widespread adoption of grass lawns.



\*Fun Fact: Kentucky Bluegrass is NOT native to Kentucky; it is native to Europe, Asia, and Northern Africa!



# Lawn Care Myths/Facts

 Lawncare is a big contributor to air pollution

**FACT!** 

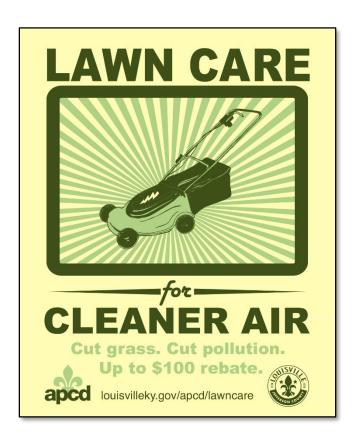
Answer: Gas mowers produce approximately 5% of all air pollution in the U.S. and over 17 million gallons of gas are spilled refueling lawn equipment in the U.S. every year. That's more oil than was spilled by the Exxon Valdez.

# Switch from gas & cut pollution by 80%! 4-cycle gas 4-cycle gas Cordless electric Plug-in electric Plug-in electric Reel 3.04 lbs/hr\* 0.0 lbs/hr

**TYPES OF LAWN MOWERS** 



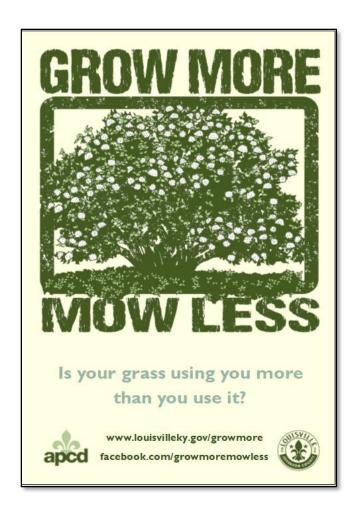
## **Lawn Care for Cleaner Air**



- Get rebates on NEW electric mowers, reel mowers, trimmers, blowers, batteries
- Recycle an old piece of equipment and double your rebate
- The Lawn Care for Cleaner
   Air Professional Program
   offers bigger rebates on
   more powerful equipment



## **Grow More Mow Less**



- This sister program to Lawn Care for Cleaner Air encourages people to ditch their turfgrass lawns in favor of plant material that doesn't need mowing (or as much mowing): trees, shrubs, flowers, gardens, ground covers, etc.
- Make sure to check out the Facebook page!



#### Resources

#### **Air Pollution Control District**

Louisvilleky.gov/APCD

#### **Air Quality Updates**

Louisvilleky.gov/airquality

Airnow.gov

# **Environmental Protection Agency (EPA)**

EPA.gov

EPA.gov/Region4

EPA.gov/indoor-air-quality-iaq

#### **Kentucky Division of Air Quality**

Air.ky.gov

#### **KAIRE**

Helptheair.org

Facebook.com/helptheair

Twitter.com/helptheair

#### **Lawn Care for Cleaner Air**

<u>Louisvilleky.gov/government/lawn-care-</u>cleaner-air

#### **Grow More Mow Less**

Facebook.com/GrowMoreMowLess

Call APCD at (502) 574-6000



#### Resources

# Louisville Metro Department of Health and Wellness

<u>louisvilleky.gov/government/health-</u>wellness

# **Centers for Disease Control**and Prevention

cdc.gov/air/air health.htm

#### **World Health Organization**

who.int/airpollution/en/

# **Consumer Product Safety Commission**

cpsc.gov/Safety-Education/Safety-Guides/Home/The-Inside-Story-A-Guide-to-Indoor-Air-Quality

#### **American Lung Association**

<u>lung.org/about-us/local-associations/kentucky.html</u>

# Kentucky African Americans Against Cancer

#### National Institute of Environmental Health Sciences

niehs.nih.gov/health/topics/agents/air
-pollution/index.cfm

#### **Pollen forecasts**

weather.com; pollen.com; accuweather.com



# Questions?

# **Louisville Metro Air Pollution Control District**

701 W. Ormsby Ave.

Ste. 303

Louisville, Ky. 40203

(502) 574-6000

www.louisvilleky.gov/APCD

Keith H. Talley Sr., Director

